Inventor(s): Richard M. Ehrlich Attorney: J. Kurin Phone: (415) 362-3800 Express Mail No: EV 326481719 US Sheet 1 of 12

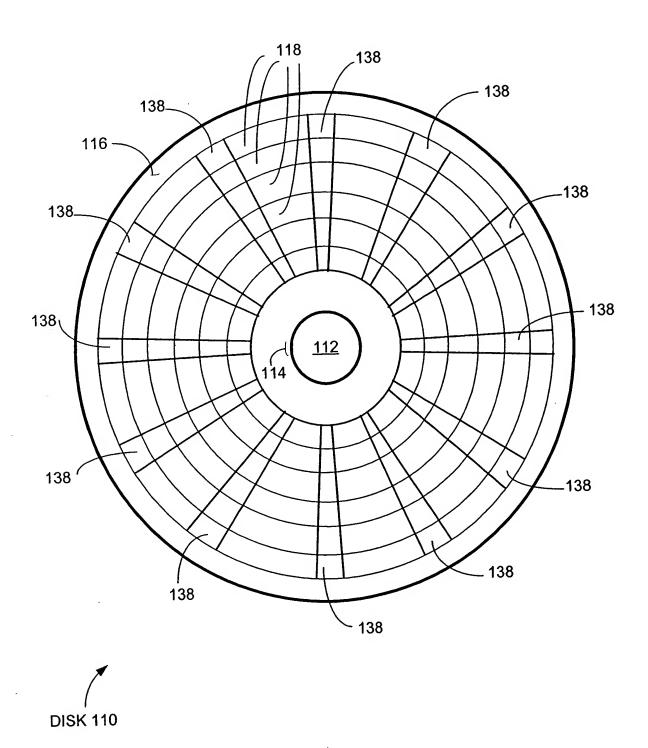
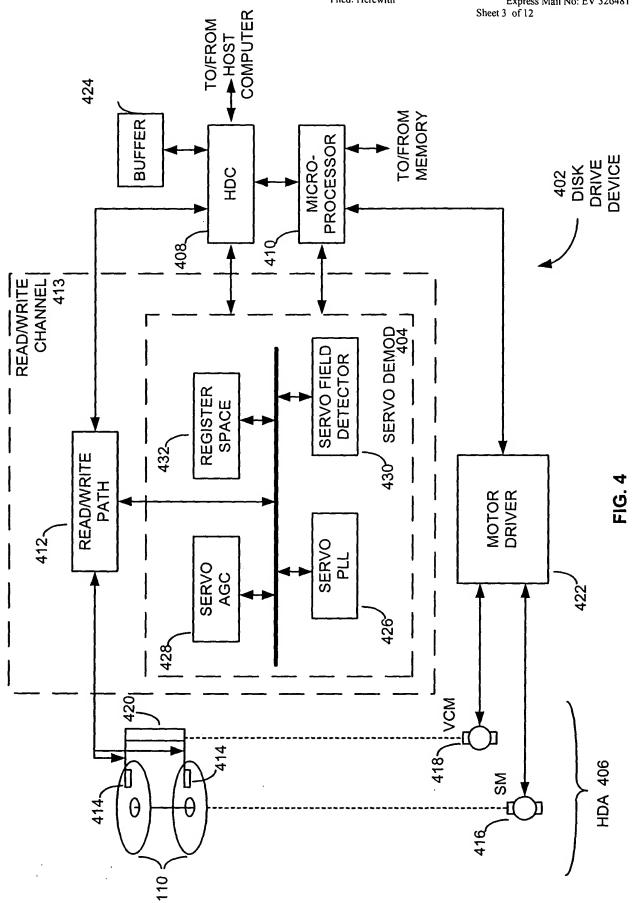


FIG. 1

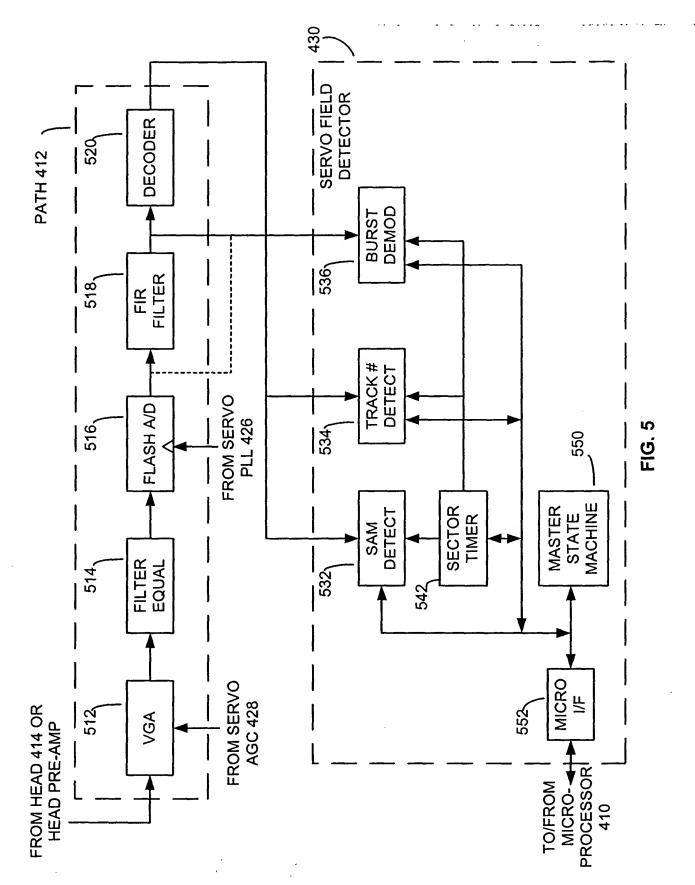
Docket No.: PANA-01046USF Appl. No.: To be assigned Confirm No.: To be assigned Filed: Herewith Inventor(s): Richard M. Ehrlich Attorney: J. Kurin Phone: (415) 362-3800 Express Mail No: EV 326481719 US Sheet 2 of 12 : SERVO FIELD 138~ O 310 DATA FIELDS $\mathbf{\omega}$ 118 Þ TRACK NUMBER FIG. 3 SERVO FIELD FIG. 2 308-138 WEDGE NUMBER DATA FIELDS SERVO ADDRESS MARK 118 PRE-AMBLE SERVO FIELD 302-138~

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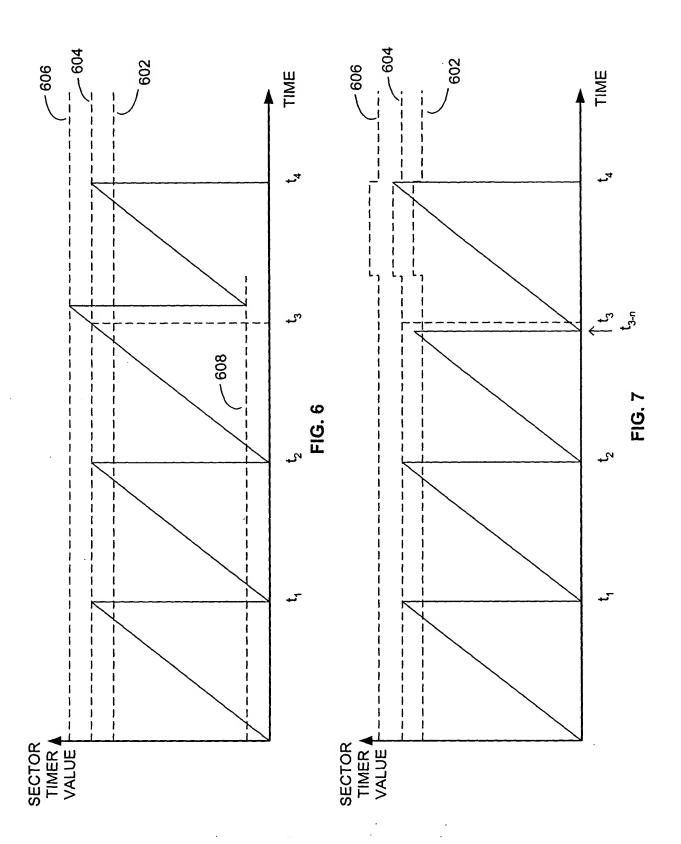
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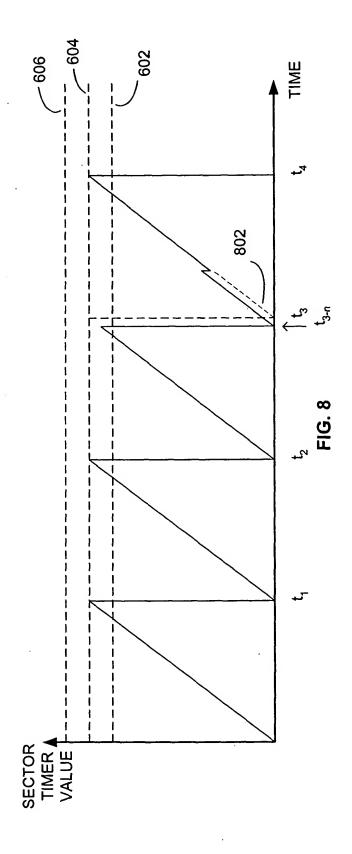


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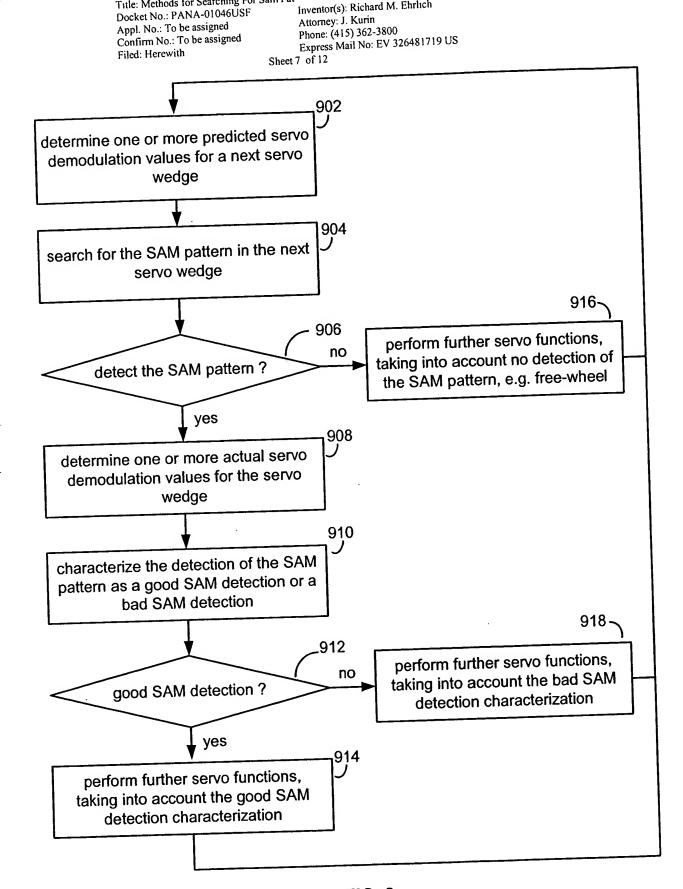


FIG. 9

Docket No.: PANA-01046USF Attorney: J. Kurin Appl. No.: To be assigned Phone: (415) 362-3800 Confirm No.: To be assigned Express Mail No: EV 326481719 US Filed: Herewith Sheet 8 of 12 1002 search for multiple occurrences of the SAM pattern in a servo wedge 1014 1004 perform further servo functions, no taking into account no detection of detect the SAM pattern? the SAM pattern, e.g. free-wheel yes 1006 for each detection of the SAM pattern in the servo wedge, characterize the detection as a good SAM detection or a bad SAM detection 1016-1008 perform further servo functions taking into account no good SAM detection(s)? bad SAM detection characterization(s) yes 1018 1010 perform further servo functions taking into account the no multiple one good SAM detection good SAM detections? characterization

yes

select one of the detections as the best

good SAM detection

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1020-1012 perform further servo functions taking into account best good SAM detection characterization FIG. 10

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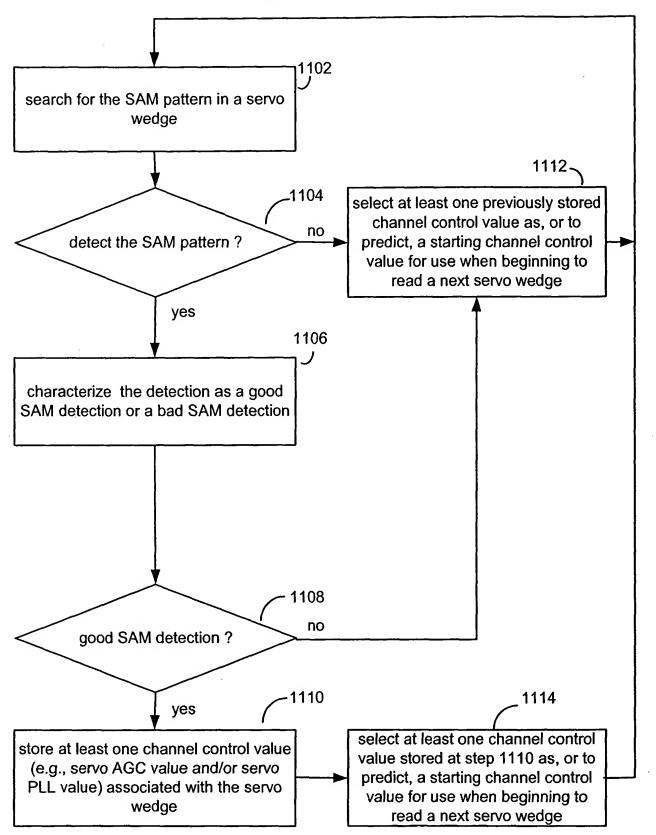


FIG. 11A

Confirm No.: To be assigned Express Mail No: EV 326481719 US Filed: Herewith Sheet 10 of 12 1122 search for the SAM pattern in a servo wedge 1124 store at least one channel control value (e.g., servo AGC value and/or servo PLL value) associated with the servo wedge 1132~ 1126 select at least one previously stored channel control value as, or to no predict, a starting channel control detect the SAM pattern? value for use when beginning to read a next servo wedge yes 1128 characterize the detection as a good SAM detection or a bad SAM detection 1130 no good SAM detection? 1134 yes select at least one channel control value stored at step 1124 as, or to predict, a starting channel control value for use when beginning to

Inventor(s). Richard Mr. Emilien

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read a next servo wedge

FIG. 11B

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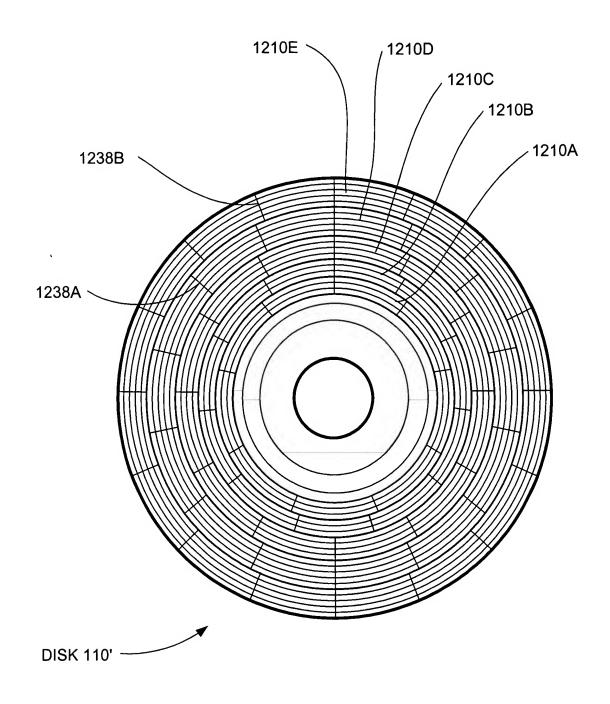


FIG. 12

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Express Mail No: EV 326481719 US TO/FROM TO/FROM COMPUTER Sheet 12 of 12 TO/FROM MEMORY BUFFER **PROCESSOR** 1302 DISK DRIVE DEVICE MICRO-HDC 410 READ/WRITE CHANNEL SERVO FIELD DETECTOR REGISTER SPACE READ PATH 432 **READ/WRITE** 439 FIG. 13 PATH MOTOR DRIVER 412B~ SERVO PLL SERVO AGC 412A-428 4187 VCM 420₁ **HDA 406** SN θ

110'